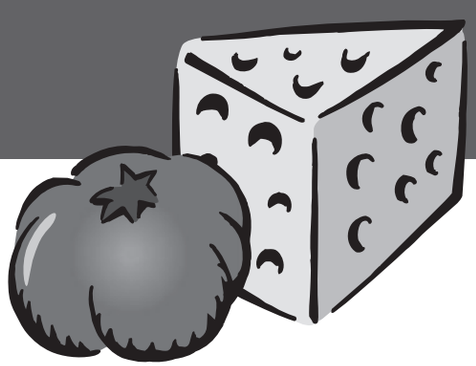
Agricultural Air Quality Conservation Management Practices For Imperial Valley



Produced In Partnership With:

IMPERIAL COUNTY CALIFORNIA 1907

Imperial County APCD

NRCS
Natural Resources Conservation Service

AIR POLLUTION CONTROL DISTRICT

November 22, 2005

To: Imperial County Farming Community
Re: Conservation Management Practices Guide

After several years of fighting the PM10 redesignation issue in courts, on August 11, 2004, the U.S. EPA issued a finding reclassifying Imperial County from a "moderate" to a "serious" PM10 non-attainment area. Under the federal Clean Air Act, Imperial County will be required to demonstrate in its "serious" Attainment Plan that it has implemented Best Available Control Measures (BACM). These measures are required for all local sources that contribute significantly to exceedances of the PM10 standard which includes agricultural operations.

Also related to the PM10 issue, an evaluation of the most recent PM10 data indicated that in addition to the contribution of local sources and transport of PM10 from Mexico, Imperial County experienced PM10 levels above the federal standard when natural events (high winds and wildland fires) impacted this region. The additional natural events contribution category indicates that the forthcoming "serious" Attainment Plan will need to address the transport of PM10 from Mexico, PM10 from natural events, and local source contributions. In recognition of the natural events contributions, the Imperial County APCD developed a Natural Events Action Plan (NEAP) to support exclusion of PM10 data impacted by natural events from attainment determinations. The U.S. EPA requires that BACM for all significant sources be implemented during the natural event. Therefore, to meet federal Clean Air Act and NEAP requirements, the Imperial County APCD joined efforts with representatives from COLAB, Farm Bureau, Vegetable Growers Association, farmers, private industry, BLM, Border Patrol, Imperial Irrigation District and County Public Works Department to develop and update Regulation VIII, Fugitive Dust Rules.

Regulation VIII requires BACM for source categories such as: construction and earthmoving activities, disturbed open areas, transport and handling of bulk materials, paved and unpaved roads, and agricultural operations. One of the most challenging tasks for the Technical Advisory Committee (rule development group) was to identify Conservation Management Practices (CMPs) to reduce fugitive dust from agricultural operations while ensuring that these practices do not create an economic burden for our farming community. The CMPs rule applies to all agricultural operation sites of forty or more acres in size and contains requirements to develop a dust control plan. The CMPs plan should list at least one CMP for each land preparation and cultivation, harvest activities, unpaved roads and unpaved traffic areas. The CMPs rule envisions a dual purpose: minimize paperwork and eliminate fees. Compliance with the agricultural control measures ensures that Imperial County complies with the Clean Air Act and NEAP requirements in our efforts to progress toward cleaner air for this community and avoid further stringent PM10 dust control regulations.

The Imperial County Air Pollution Control District commends the efforts of all the participants on developing these rules. To have such a positive outcome to such a daunting task is a testament to our ability to work cooperatively. This guide will help local farmers comply with the regulation's requirements by allowing them to select and implement the most cost effective conservation practices for their operations, as well as assist in developing the CMPs plan.

Sincerely,

Stephen L. Birdsall
Air Pollution Control Officer

AIR POLLUTION CONTROL DISTRICT

December 12, 2005

TO: Ayron Schoneman
FROM: Stephen Birdsall
SUBJECT: APCD Enforcement Practice/Mutual Settlement Policy

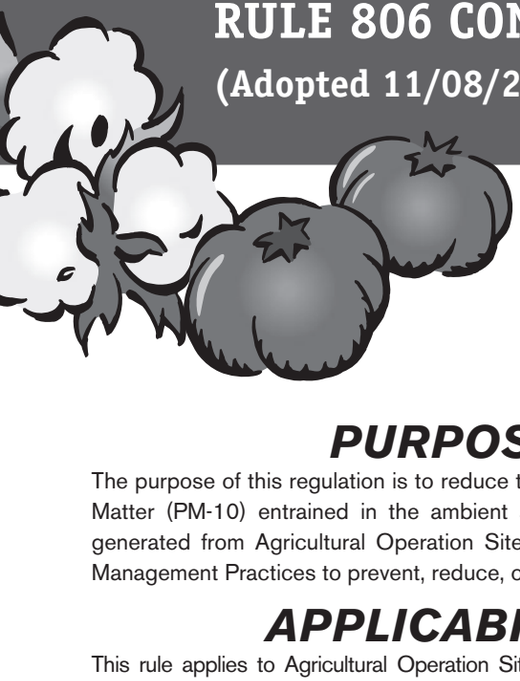
It is the practice of the ICAPCD enforcement staff to issue a warning to first time violators along with a copy of the rule violated and information on how to comply. This is used as an educational opportunity by the ICAPCD. A log is kept with the name, location, and contact information for the person responsible for the violation. This log is updated daily and available to each inspector. The second violation at the same location of the same rule results in the issuance of a Notice of Violation. In cases where the first time violation is egregious in nature a Notice of Violation will be issued.

Once a Notice of Violation has been issued a fine is determined based on our Mutual Settlement Program Policy. A letter is then sent to the offender with a copy of the Notice of Violation, an explanation of the Rule violated, a determination of the penalty amount due and date penalty is payment is due, and an offer to resolve the violation through the Mutual Settlement Program.

Mutual Settlement Meetings (MSP meetings) are typically held once every month. It is up to the recipient of the Notice of Violation to call and request a meeting.

RULE 806 CONSERVATION MANAGEMENT PRACTICES

(Adopted 11/08/2005)



PURPOSE

The purpose of this regulation is to reduce the amount of fine Particulate Matter (PM-10) entrained in the ambient air as a result of emissions generated from Agricultural Operation Sites by requiring Conservation Management Practices to prevent, reduce, or mitigate PM-10 emissions.

APPLICABILITY

This rule applies to Agricultural Operation Sites located within the Imperial County. Effective on and after January 1, 2006, an owner/operator shall implement the applicable CMPs selected for each Agricultural Operation Site.

DEFINITIONS

In addition to the definitions of terms in Rule 800 (General Requirements for Control of Fine Particulate Matter (PM-10), the following definitions shall govern the implementation of this rule:

AGRICULTURAL OPERATIONS: The growing and harvesting of crops for the primary purpose of earning a living.

AGRICULTURAL OPERATION SITE: One or more agricultural parcels that meet the following:

Are under the same or common ownership or operation, or which are owned or operated by entities which are under common control; and

Are located on one or more contiguous or adjacent properties wholly within Imperial County.

AGRICULTURAL PARCEL: A portion of real property used by an owner or operator for carrying out a specific agricultural operation. Roads, vehicle/equipment traffic areas, and facilities, on or adjacent to the cropland are part of the agricultural parcel.

ALTERNATIVE TILLING: Rotate tillage leaving residue on soil. Tilling alternative rows for weed management and wind blown dust allows for approximately 50% reduction in field activity in addition to stabilizing soil surface and reducing soil compaction.

BALING/LARGE BALES: Using balers to harvest crop. It reduces PM emissions from crops traditionally harvested by chopping, truck, passes and residue burning.

BED/ROW SIZE OR SPACING: Increase or decrease the size of the planting bed area (can be done for field and permanent crops). Spacing adjustments reduce the number of passes and soil disturbance by increasing plant density/canopy through reduction of row width to contain PM within the canopy.

CHEMIGATION/FERTIGATION: Application of chemicals through an irrigation system. Each application reduces the need to travel in the field for application purposes, thus reducing the number of passes and soil disturbance while increasing the efficiency of the application.

CHIPS/MULCHES, ORGANIC MATERIALS, POLYMERS, ROAD OIL & SAND: Application of any nontoxic chemical or organic dust suppressant that meets all specification required by any federal, state, or local water agency and is not prohibited for use by any applicable regulations.

COMBINED OPERATION: To combine equipment, to perform several operations during one pass. The reduction in the number of passes necessary to cultivate the land will result in fewer disturbances to the soil. Other benefits are reduction of soil compaction and time to prepare fields, both of which can be precursors to additional tillage requirements.

CONSERVATION IRRIGATION: To conserve the quantity of water use, e.g.: drip, sprinkler, buried/underground line. Conserving water reduces weed population, which in turn reduces the need for tillage as well as reduces soil compaction.

CONSERVATION MANAGEMENT PRACTICE (CMP): An activity or procedure that prevents, reduces, or mitigates PM-10 normally emitted by, or associated with, an agricultural activity.

CONSERVATION MANAGEMENT PRACTICES PLAN (CMP PLAN): A document prepared by the owner or operator of an Agricultural Operation site that lists the selected CMPs for implementation. The CMP Plan also contains, but is not limited to, contact information for the owner or operator, a description of the Agricultural Operation Site and locations of Agricultural Parcels, and other information describing the extent and duration of CMP implementation.

CONSERVATION TILLAGE (e.g.: no tillage, minimum tillage): Types of tillage that reduce loss of soil and water in comparison to Conventional Tillage. It reduces the number of passes and amount of soil disturbance. It improves soil because it retains plant residue and increases organic matter.

COVER CROPS: Use seeding or natural vegetation/regrowth of plants to cover soil surface. It reduces soil disturbance due to wind erosion and entrainment.

EQUIPMENT CHANGES/TECHNOLOGICAL IMPROVEMENTS: To modify the equipment such as tilling; increase equipment size; modify land planing and land leveling; matching the equipment to row spacing; granting to new varieties or other technological improvements. It reduces the number of passes during an operation, thereby reducing soil disturbance.

FALLOWING LAND: Temporary or permanent removal from production. Eliminates entire operation/passes or reduces activities.

GRAVEL: Placing a layer of Gravel with enough depth to minimize dust generated from vehicle movement and to dislodge any excess debris which can become entrained.

GREEN CHOP: The harvesting of a forage crop without allowing it to dry in the field. It reduces multiple equipment passes in-field as well as reduces soil disturbance and soil compaction.

HAND HARVESTING: Harvesting crop by hand. It reduces soil disturbance due to machinery passes.

INTEGRATED PEST MANAGEMENT: A decision process that uses a combination of techniques including organic, conventional and biological farming concepts to suppress pest problems. It creates beneficial insect habitat that reduces the use of herbicides/pesticides thereby reducing number of passes for spraying. It also reduces soil compaction and the need for additional tillage.

MECHANICAL PRUNING: Using a machine instead of hand labor to prune (Applies as an Unpaved Road CMP only). It reduces vehicle trips, thereby reducing PM emissions.

MULCHING: Applying or leaving plant residue or other material to soil surface. It reduces entrainment of PM due to winds as well as reduces weed competition thereby reducing tillage passes and compaction.

NIGHT FARMING: Operate at night, if practical, when moisture levels are higher and winds are lighter. It decreases the concentration of PM emissions during daytime and the increased ambient humidity reduces PM emissions during the night.

NIGHT HARVESTING: Implementing cultural practices at night, or at times or high humidity. It reduces PM by operating when ambient air is moist, thereby reducing PM emissions.

NO BURNING: Switching to a crop/system that would not require waste burning. It reduces emissions associated with burning.

NON TILLAGE/CHEMICAL TILLAGE: Use flail mower, low volume sprayers or heat delivery systems (as harvest pre-conditioner). It reduces soil compaction and stabilizes soil through elimination or reduction of soil tillage passes.

ORGANIC PESTICIDES: Use biological control methods or non-chemical control methods. It reduces chemical use, thereby reducing passes.

PAVING: To pave currently Unpaved Roads.

PRECISION FARMING (GPS): Using satellite navigation to calculate position in the field, therefore manage/treat selective area. It reduces overlap and allows operations to occur during inclement weather conditions and at night thereby generating less PM.

PRE-HARVEST SOIL PREPARATION: Applying a light amount of water or stabilizing material to soil prior to harvest (when possible). It reduces PM emissions at harvest.

RESTRICTED ACCESS: To restrict public access to private roads. It reduces vehicle traffic and thus reduces associated fugitive dust.

SHUTTLE SYSTEM/LARGE CARRIER: Multiple bin/trailer. Haul multiple or larger trailers/bins per trip thereby reducing emissions through reduced passes.

SPEED LIMITS: Enforcement of speeds that reduce visible dust emissions. The dust emissions from unpaved roads are a function of speed meaning reducing speed reduces dust.

TRACK-OUT CONTROL: Minimize any and all material that adheres to and agglomerates on all vehicle and equipment from unpaved roads and falls onto a paved public road or the paved shoulder of a paved public road.

TRANSGENIC CROPS: Use of GMO or Transgenic crops such as "herbicide-ready." It reduces need for tillage or cultivation operations, as well as reduces soil disturbance. It can also reduce the number of chemical applications.

WATER APPLICATION: Application of water to unpaved roads and traffic areas.

WIND BARRIER: Artificial or vegetative wall/fence that disrupts the erosive flow of wind over unprotected land.

Requirements For Agricultural Operation Sites

All Persons who own or operate an Agricultural Operation Site of forty (40) acres or more in size shall implement in each Agricultural Parcel at least one of the Conservation Management Practices listed for each of the following categories:

Land preparation and cultivation
Harvest activities
Unpaved Roads
Unpaved Traffic Areas

The owner or operator of an Agricultural Operation Site may implement more than one Conservation Management Practices for one or more of the categories.

The owner or operator of an Agricultural Operation Site shall ensure that the implementation of each selected Conservation Management Practices does not violate any other local, state, or federal law.

The owner or operator of an Agricultural Operation Site may develop alternative CMPs. The owner or operator shall submit to the APCD a technical evaluation of the alternative CMPs, demonstrating that the alternative CMP achieves PM-10 emission reductions that are at least equivalent to other CMPs available for the applicable operation. The APCD will review the technical evaluation, and the alternative CMP must receive approval by the APCD before being included in the CMP Plan.

The owner or operator shall prepare a CMP Plan for each Agricultural Operation Site. The CMP Plan shall be made available to the APCD upon request. The CMP Plan shall be provided to the APCD within 72 hours of notice to the owner or operator.

The owner or operator of an Agricultural Operation Site shall implement at least one of the following CMPs in each Agricultural Parcel to reduce PM10 emissions from land preparation and cultivation:

Alternate Till, Bed/Row Size Spacing, Chemical/Fertigation, Combined Operations, Conservation Irrigation, Conservation Tillage, Cover Crops, Equipment Changes/Technological Improvements, Fallowing Land, Integrated Pest Control, Mulching, Night Farming, Non Tillage /Chemical Tillage, Organic Pesticides, Precision Farming (GPS), or Transgenic Crops

The owner or operator of an Agricultural Operation Site shall implement at least one ofthe following CMPs in each Agricultural Parcel to reduce PM10 emissions from harvesting:

Baling/Large Bales
Combined Operations
Equipment Changes/Technological Improvements
Green Chop
Hand Harvesting
Fallowing Land
Night Harvesting
No Burning
Pre-Harvesting Soil Preparation
Shed Packing
Shuttle System/Large Carrier

The owner or operator of an Agricultural Operation Site shall implement at least one of the following CMPs for each Unpaved Road to reduce PM10 emissions:

Chips/Mulches, Organic Materials, Polymers, Road Oil and Sand
Gravel
Paving
Restricted Access
Speed Limit
Track-Out Control
Water
Wind Barrier

The owner or operator of an agricultural operation site shall implement at least one of the following CMPs for each unpaved traffic area to reduce PM10 emissions:

Chips/Mulches, Organic Materials, Polymers, Road Oil and Sand
Gravel
Paving
Restricted Access
Speed Limit
Track-Out Control
Water
Wind Barrier

An owner or operator shall prepare a CMP Plan for each Agricultural Operation Site. Each CMP Plan shall include, but is not limited to, the following information:

The name, business address, and telephone number of the owner or operator responsible for the preparation and implementation of the CMP Plan.

The signature of the owner or operator and the date that the CPM Plan was signed.

The location of the Agricultural Operation Site: cross roads; canal and gate number.

The crop grown at each location covered by the CMP Plan, total acreage for each crop, the length (miles) of unpaved roads, and the total area (acres or square feet) of the unpaved equipment and traffic areas to be covered by the CMP Plan, and:

The CMPs implemented or planned for implementation.

Other relevant information as determined by the APCD.

VIOLATIONS

Failure to comply with any provisions of this rule shall constitute a violation of Regulation VIII. Failure to comply with the provisions of a CMP Plan shall also constitute a violation of Regulation VIII.

RECORD OF CONTROL IMPLEMENTATION

Any Person subject to the requirements of this rule shall maintain a copy of the CMP Plan and any supporting documentation necessary to confirm implementation of the CMPs. An owner or operator implementing alterative CMPs shall maintain a copy of technical evaluation for alternative CMPs and documentation of APCD approval of alternative CMPs. Records shall be maintained for two years after the date of each entry and shall be provided to the APCD upon request.

Contact Information

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